WHAT IS CLAIMED IS:

1. A CSMA wireless LAN comprising:

antenna means;

terminal station identifier means for determining whether there are at least two transmitting terminal stations in response to signal receptions by the antenna means; and

power notifying means for notifying at least one of the determined transmitting terminal stations to increase a transmitting power when it is determined by the terminal station identifier means that there are at least two transmitting terminal stations.

2. A CSMA wireless LAN according to claim 1, further comprising:

the antenna means having a plurality of antenna elements;

monitor means for monitoring a received power of each antenna element;

wherein the terminal station identifier means determines whether there are at least two transmitting terminal stations based on comparisons of the received power of each antenna element monitored by the monitor means with a reference power.

3. A CSMA wireless LAN comprising:

a plurality of antenna elements forming a communication area comprised of a plurality of sectors;

terminal station identifier means for determining whether there are at least two transmitting terminal stations in response to signal receptions by the plurality of antenna elements; and

sector notifying means for notifying at least one of the determined transmitting terminal stations of sector information about the location of the terminal stations when it is determined by the terminal station identifier means that there are at least two terminal stations.

4. A CSMA wireless LAN according to claim 3, wherein:

the sector notifying means notifies a number indicative of a sector of the location of terminal stations for the sector location of the transmitting terminal stations.

5. A CSMA wireless LAN according to claim 3, wherein:

the sector notifying means notifies an angle between a maximum irradiation orientation of the sector of the location of the transmitting terminal stations and a reference method for the sector location of transmitting terminal stations.

6. A CSMA wireless LAN according to claim 3 further comprising:

monitor means for monitoring a received power of each antenna element,

wherein the terminal station identifier means determines whether there are at least two transmitting terminal

stations corresponding to comparisons of the received power of the plurality of antenna elements monitored by the monitor means with a reference power.

7. A CSMA wireless LAN comprising:

a plurality of antenna elements forming a communication area comprised of a plurality of sectors;

monitor means for monitoring a received power of each antenna element;

terminal station identifier means for determining whether there are at least two terminal stations in response to a signal reception by each antenna element; and

sector notifying means for notifying at least one of transmitting terminal stations of sector information about the location of the terminal stations and the received power from the transmitting terminal stations by the monitor means when it is determined by the terminal station identifier means that there are at least two terminal stations.

8. A CSMA wireless LAN comprising:

a plurality of antenna elements forming a communication area comprised of a plurality of sectors;

terminal station identifier means for determining there are other transmitting terminal stations at the time of transmission from one terminal station in response to receptions by the plurality of antenna elements;

sector notifying means for notifying the other

terminal stations of the sector location of the other terminal stations when it is determined by the terminal station identifier means that there are other terminal stations.

9. A CSMA wireless LAN comprising:

a plurality of antenna elements forming a communication area comprised of a plurality of sectors;

monitor means for monitoring a received power of each antenna element;

terminal station identifier means for determining there are other transmitting terminal stations at the time of transmission from one terminal station in response to the reception by the plurality of antenna elements;

notifying means for notifying the other terminal stations of the sector location of the other terminal stations and the received power from the other terminal stations by the monitor means when it is determined by the terminal station identifier means that there are other terminal stations.

10. A CSMA wireless LAN according to claim 1 further comprising:

a terminal station including transmitting power means capable of increasing the transmitting power when notified to increase power from the power notifying means.

11. A CSMA wireless LAN further comprising:

a terminal station having sector information notified

from the sector notifying means for calculating an orientation of a hidden terminal station in response to the notified sector information in order to set a directivity to the calculated direction of the hidden terminal station.

12. A CSMA wireless LAN according to claim 11, wherein:

the terminal station has a plurality of antenna elements for forming a transmission beam directed toward the calculated direction of the hidden terminal station, each antenna element outputting a non-directional radio wave beam.

13. A CSMA wireless LAN according to claim 3 further comprising:

a terminal station having the sector information notified from the sector notifying means for calculating an orientation of a hidden terminal station in response to the notified sector information, the terminal station further having a directional sensor for detecting the orientation for compensating for the calculated orientation in response to the orientation detected by the sensor in order to set the directivity to the compensated direction.

14. A CSMA wireless LAN according to claim 7 further comprising:

a terminal station having the sector information notified from the sector notifying means for calculating an orientation of a hidden terminal station in response to the

notified sector information, and the terminal station further having a plurality of antenna elements for forming a transmission beam directed to the calculated direction,

wherein the transmission beam is a radio wave output omnidirectionally and a gain of the transmission beam is calculated in response to a notified received power.

15. A CSMA wireless LAN according to claim 9 further comprising:

a terminal station having sector information notified from the sector notifying means for calculating an orientation of a base station having the sector notifying means in response to the notified sector information in order to set a directivity to the calculated direction of the base station.

16. A CSMA wireless LAN according to claim 9 further comprising:

a terminal station having sector information notified from the sector notifying means for calculating an orientation of a base station having the sector notifying means in response to the notified sector information, and the terminal station further having a plurality of antenna elements for forming transmission beam directed to the calculated direction,

wherein the transmission beam radio wave is output omnidirectionally, and a gain of the transmission beam being calculated in response to the notified received power.

17. A CSMA wireless LAN comprising:

antenna means;

terminal station identifier means for determining, during a reception of signal transmission from a first terminal station, whether there is a second transmitting terminal station in response to receptions of the antenna means; and

notifying means for notifying, when it is determined by the terminal station identifier means that there is the second terminal station, at least one of the first and the second terminal stations of the information about the communication area such that the communication area of the at least one of the first and the second terminal stations may cover the communication area of the other terminal station.

18. A CSMA wireless LAN according to claim 17 further comprising:

a terminal station for altering the communication area in response to the information.

19. A CSMA wireless LAN according to claim 17 further comprising:

a terminal station having information notified from the notifying means and having a directional sensor for altering the communication area in response to the direction detected by the sensor and the notified information.